

CLAIMS

I claim:

1. A pedicle screw system, comprising:
 - an attachment member; and
 - a receiver, disposed with the attachment member, comprising:
 - a plurality of wall sections defining a longitudinal bore in the receiver and a first transverse channel perpendicular to the bore, the first transverse channel adapted to engage with an elongated member, each of the plurality of wall sections comprising:
 - a longitudinal channel, the channel having a first width proximal to the bore and a second width distal to the bore, the second width larger than the first width;
 - a closure member removably disposable within the bore; and
 - a locking member, removably disposable within the bore between the closure member and the elongated member, the locking member shaped to interlock with the longitudinal channels,
 - wherein the closure member, when disposed within the bore with the locking member, prevents removal of the locking member from the receiver.
 2. The pedicle screw system of claim 1, wherein the longitudinal channels have a substantially triangular cross-section.
 3. The pedicle screw system of claim 1, wherein the longitudinal channels have a substantially T-shaped cross-section.
 4. The pedicle screw system of claim 1, the closure member threadedly engageable with the plurality of wall sections.
 5. The pedicle screw system of claim 1, wherein the locking member and the closure member are inter-engaged such that the locking member and the closure member can swivel relative to each other.
 6. The pedicle screw system of claim 5, the locking member comprising:

a locking body, shaped to interlock with the longitudinal channels; and
a pin, central to and extending perpendicular to the locking body, the pin
engaging with a central opening in the closure member.

7. The pedicle screw system of claim 6, wherein the pin extends through the central opening of the closure member when the closure member and the locking member are inter-engaged, the pin flared to prevent disengagement of the closure member and the locking member.

8. The pedicle screw system of claim 1, wherein the closure member is self-threading.

9. The pedicle screw system of claim 1, the locking member comprising:
a second transverse channel, the second transverse channel adapted to fix the elongated member between the first transverse channel and the second transverse channel when the locking member is disposed within the bore and tightened against the elongated member by the closure member.

10. The pedicle screw system of claim 1, wherein the attachment member is a screw shank, the screw shank removably disposed with the receiver.

11. The pedicle screw system of claim 10,
wherein the screw shank has a polyaxial head, and
wherein the polyaxial head of the screw shank is disposed within a polyaxial joint of the receiver,
whereby the screw shank can be universally positioned relative to the longitudinal axis of the receiver.

12. The pedicle screw system of claim 10, wherein the screw shank has a drive slot in a head portion of the screw shank, the drive slot adapted for insertion and positioning of the screw shank.

13. The pedicle screw system of claim 1, wherein the attachment member is a hook.

14. The pedicle screw system of claim 13, wherein the hook is integral with the receiver.

15. A method of capturing an elongated member in a receiver member of a medical device, comprising:

inserting the elongated member within a transverse channel between a plurality of walls surrounding a longitudinal bore in the receiver;

saddling the elongated member with a locking member disposed within the bore perpendicular to the elongated member;

dovetailing the locking member with a longitudinal channel formed in each of the plurality of walls, preventing outward movement of the plurality of walls;

tightening the locking member onto the elongated member.

16. The method of claim 15, tightening the locking member comprising:

rotating a closure member within the bore,

wherein rotating the closure member within the bore urges the locking member against the elongated member.

17. The method of claim 16, wherein rotating the closure member comprises:

threading the closure member in a threaded section formed around the bore in an interior surface of each of the plurality of walls.

18. The method of claim 16, further comprising:

rotatably inter-engaging the closure member and the locking member prior to insertion into the bore.

19. The method of claim 18, rotatably inter-engaging the closure member and the locking member comprising:

extending a pin from a surface of the locking member perpendicular to the locking member;

inserting the pin into an opening in the closure member;

flaring the pin, preventing removal of the locking member from the closure member.